

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

JACQUELINE C. RUPERT,)	Civil Action No. 12-331
)	
Plaintiff,)	Judge Cathy Bissoon
v.)	
)	
FORD MOTOR COMPANY,)	
)	
Defendant and Third-Party)	
Plaintiff,)	
)	
v.)	
)	
STEVEN B. MACON AND BRAYMAN)	
CONSTRUCTION CORPORATION,)	
)	
Third-Party Defendants.)	

**MEMORANDUM OF LAW IN SUPPORT OF DEFENDANT FORD MOTOR COMPANY'S
MOTION TO EXCLUDE THE OPINIONS OF BYRON BLOCH AND CAM COPE, AND
MOTION FOR SUMMARY JUDGMENT ON PLAINTIFF'S CRASHWORTHINESS
CLAIMS OR, IN THE ALTERNATIVE, FOR A DAUBERT HEARING**

AND NOW, comes the Defendant, Ford Motor Company ("Ford"), by and through its counsel, Dickie, McCamey & Chilcote, P.C., and Dykema Gossett, PLLC and files this Memorandum of Law in Support of Defendant Ford Motor Company's Motion to Exclude the Opinions of Byron Bloch and Cam Cope, and Motion For Summary Judgment on Plaintiff's Crashworthiness Claims, or, in the Alternative, for a Daubert Hearing, and in support thereof avers as follows:

I. STATEMENT OF THE CASE

This case stems from a May 27, 2010 accident which occurred on Route 228 in Adams Township, Butler County, Pennsylvania. On that date, Michael Rupert was driving a 1993 Ford F-250 4x4 pick-up truck when Third Party Defendant Steven B. Macon caused his vehicle to cross the center line, striking the left front area of the Rupert vehicle at a high rate of speed. The impact was

so forceful that Mr. Rupert's F-250 was pushed northeasterly and into a ditch. A third vehicle which had been travelling westbound behind Mr. Rupert crashed into his truck, under-riding its left rear end. Thereafter, a fire began in or near the Rupert vehicle. (Amended Complaint, ¶¶ 15-31). Mr. Rupert sustained serious bodily injury as a result of this event.

Mr. Rupert had purchased the 1993 Ford F-250 4x4 pick-up truck (which was seventeen years old at the time of the accident) in September of 2002 when it was already almost nine years old. (Amended Complaint, ¶ 14).

Plaintiff asserts product liability claims against Ford, alleging that the subject vehicle was defective in that the cab structure of the 1993 truck became excessively crushed in the collision causing entrapment, and that the fuel rail system allowed gasoline to be released causing the fire. The claim of Jacqueline C. Rupert ("JCR") against Ford sounds in loss of consortium.

In November 2013, the case brought by Michael Rupert against Ford was settled. Jacqueline C. Rupert ("JCR") is now the sole Plaintiff in this lawsuit. In order to succeed in her action she is required to establish Ford's liability, as well as her damage loss.

II. LEGAL STANDARD

A court should grant summary judgment "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." *Sentry Select Ins. Co. v. LBL Skysystems (U.S.A.), Inc.*, 486 F. Supp. 2d 496 (E. D.Pa. 2007) (citing Fed. R. Civ. P. 56(c)); *Celotex Corp. v. Catrett*, 477 U. S. 317 (1986).

In considering a Motion for Summary Judgment, "the inference to be drawn from the underlying facts . . . must be viewed in the light most favorable to the party opposing the motion." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U. S. 574 (1986). In a Summary Judgment Motion, the moving party has the initial burden of establishing the absence of a genuine issue of

material fact. *White v. Ottinger*, 442 F. Supp. 2d 236, 242 (E.D.Pa. 2006). The party opposing the Motion, however, cannot rely merely upon bare assertions, conclusory allegations, or suspicions to support his or her claim. *Firemans Ins. Co. v. Dufresne*, 676 F.2d 965, 969 (3d Cir. 1982).

III. ARGUMENT

A. **THE BASIS FOR THE OPINIONS OF PLAINTIFF'S EXPERTS, BYRON BLOCH AND CAM COPE, FAIL TO SATISFY THE *DAUBERT* RELIABILITY TEST, AND THUS, THEIR TESTIMONY REGARDING FORD IS INADMISSIBLE AND FORD IS ENTITLED TO JUDGMENT AS A MATTER OF LAW**

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the United States Supreme Court expressly imposed upon the trial judge a “gatekeeping responsibility” to ensure that expert testimony is both based on a reliable foundation and is relevant to the issues in the case before such testimony can even be evaluated to ascertain whether plaintiff has made out a prima facie case under the applicable tort law. *Id.* at 590. Because expert witnesses, unlike ordinary witnesses, may offer opinions that are not based on first-hand knowledge or observation, the Court recognized the unique potential for expert evidence to “be both powerful and quite misleading.” *Id.* at 595.

The plaintiffs in *Daubert* asserted claims against a prescription drug manufacturer for serious birth defects allegedly resulting from the mothers' prenatal ingestion of the anti-nausea drug, Bendectin. *Id.* at 582. On a motion for summary judgment by the defendant manufacturer, the plaintiffs conceded that the medical literature did not support a causal relationship between the drug and birth defects. *Id.* at 583. Nevertheless, the plaintiffs opposed the motion with the affidavits of several experts who, based on a recalculation of the data in previously published studies, concluded that the infants' injuries were caused by the drug. *Id.* The trial court granted summary judgment in favor of the defendant based upon *Frye v. U.S.*, 293 F. 1013 (D.C. Cir. 1923). *Id.* The Ninth Circuit affirmed the trial court's ruling, which was then appealed to the United States Supreme Court. *Id.* at

584. The United States Supreme Court, in reviewing the trial court's gatekeeping obligations under Federal Rule of Evidence 702, stated unequivocally that:

The subject of an expert's testimony must be "scientific . . . knowledge." The adjective "scientific" implies a grounding in the methods and procedures of science. Similarly, the word "knowledge" connotes more than subjective belief or unsupported speculation. The term "applies to any body of known facts or to any body of ideas inferred from such facts or accepted as truths on good grounds."

* * *

Proposed testimony must be supported by appropriate validation - i.e., "good grounds" based on what is known. In short, the requirement that an expert's testimony pertain to "scientific knowledge" establishes a standard of evidentiary reliability.

Id. at 589-90.

Thus, the trial judge must determine at the outset, pursuant to Rule 104(a), whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. *Id.* at 592. The Court announced four factors, labeled "general observations" that guide the evaluation of an expert's methodology:

- (1) whether the method can be and has been tested;
- (2) whether the theory or technique has been subjected to peer review and publication;
- (3) whether it has an acceptable rate of error and the existence and maintenance of controlling standards; and,
- (4) whether it is generally accepted within the scientific community.

Id. at 593-94.

On remand, the Ninth Circuit Court of Appeals in *Daubert* noted that something does not become scientific knowledge just because it is uttered by a scientist and that an expert's self-serving assertion that his conclusions are derived by the scientific method cannot be deemed conclusive. *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1316 (9th Cir. 1995). Regardless of who the scientist is or how impressive his or her credentials are, the ultimate question is whether the proposed testimony amounts to scientific knowledge, constitutes "good science" and was derived by the scientific method. *Id.* at 1315. The task is to analyze "not what the experts say, but what basis

they have for saying it.” *Id.* at 1316. Unsupported speculation and bald assertions of valid methodology are not sufficient; the party offering the expert testimony must show that the expert's opinions are based on good science, and that there is objective, independent validation to the methodology or reasoning process. *Id.* at 1316.

The Ninth Circuit Court of Appeals further instructed that the trial court should inquire whether the research and analysis have been subjected to normal scientific scrutiny through the peer review process and published in reputable scientific journals. If the only review has been from judges and juries and the only place the theories have been published is in legal reporters, then the source is highly questionable. *Id.* at 1318. The Third Circuit Court of Appeals in *In Re: Paoli Railroad Yard PCB Litigation*, 35 F.3d 717 (3rd Cir. 1994), interpreted *Daubert* as being in accord with its basic holdings in *United States v. Downing*, 753 F.2d 1224 (3rd Cir. 1985). In this regard, the Third Circuit directed as follows:

We now make clear that a district court should take into account all of the factors listed by either *Daubert* or *Downing* as well as any others that are relevant. Thus, the factors *Daubert* and *Downing* have already deemed important include:

- (1) whether a method consists of a testable hypothesis;
- (2) whether the method has been subjected to peer review;
- (3) the known or potential rate of error;
- (4) The existence and maintenance of standards controlling the technique's operation;
- (5) whether the method is generally accepted;
- (6) the relationship of the technique to methods which have been established to be reliable;
- (7) the qualifications of the expert witness testifying based on the methodology; and
- (8) the non-judicial uses to which the method has been put.

Paoli, 35 F.3d at 742, fn. 8.

Significantly, the Third Circuit Court of Appeals recognized in *Paoli* that the proponent of the expert testimony must do more than make a mere prima facie showing of the reliability of the expert testimony; the proponent of the expert must demonstrate by a preponderance of the evidence

that the expert's opinions are reliable. *Id.* at 734-44. In *Habecker v. Clark Equipment Co.*, 36 F.3d 278 (3rd Cir. 1994), the Third Circuit analyzed whether testimony from a safety director who performed a reconstruction of the forklift accident at issue in a product liability crashworthiness case should be admitted. In applying the *Daubert* reliability analysis, the court held that the proposed testimony was inadmissible because it lacked sufficient reliability. In this regard, the Court noted that the simulation did not sufficiently take into account several aspects of the subject accident, including, among other factors, the velocity of the forklift at the time of the accident. *Id.*

Finally, in the highly analogous case of *Oddi v. Ford Motor Co.*, 234 F.3d 136, 142 (3rd Cir. 2000), the Court of Appeals for the Third Circuit affirmed the trial court's exclusion of the plaintiff's experts from testifying because of the absence of adequate testing. In *Oddi*, the plaintiff, who suffered catastrophic injuries in a motor vehicle accident, filed a crashworthiness case against the defendants, alleging defective design of the vehicle. *Id.* at 140-41. The plaintiff retained two experts: an engineer to testify about the alleged defective design of the vehicle and a bio-mechanist to testify about the plaintiff's injuries. *Id.* at 141. Defendants moved for summary judgment, arguing that the proposed expert testimony of both of plaintiff's experts should be excluded. *Id.* at 141-42. The trial court granted the defendants' motions for summary judgment, finding that the plaintiff's experts' proposed testimony was inadmissible and that, as a result, the plaintiff could not set forth a *prima facie* crashworthiness case against the defendants. *Id.* at 142.

On appeal, the Court of Appeals for the Third Circuit affirmed the trial court. *Id.* at 141. The Third Circuit based its decision, in large part, on the fact that the plaintiff's engineering expert failed to "test or substantiate the modifications he was suggesting." *Id.* at 149. The Court noted that because of the lack of testing by the plaintiff's engineering expert, the plaintiff "could not establish the existence of [the engineering expert]'s methodology and research let alone the adequacy of it." *Id.* at 156. Because the engineering expert did not conduct any tests, "he used

little, if any, methodology beyond his own intuition.” *Id.* at 158. The Court affirmed the exclusion of the expert testimony and the grant of summary judgment in favor of the defendants.

In the present case, like in *Oddi*, Plaintiff cannot “establish the existence of [Bloch’s or Cope’s] methodology and research let alone the adequacy of it . . . [and they] used little, if any, methodology beyond [their] own intuition.” *See Oddi*, 234 F.3d at 156, 158. In addition, Plaintiff is unable to show with any reliability the existence of enhanced injuries resulting from an alleged defective design. Therefore, the proposed testimony of Bloch and Cope should be excluded.

1. BYRON BLOCH

Plaintiff attempts to introduce Byron Bloch as her design defect/crashworthiness expert. Byron Bloch, however, not only lacks sufficient qualifications to render an opinion as a design/crashworthiness expert, but also fails to use proper methodology to support his speculative conclusions.

Byron Bloch is not an engineer. *See* Appendix to Concise Statement of Material Facts, Exhibit 1, p. 11. Byron Bloch has never even taken the test to become a professional licensed engineer in any state. Exhibit 1, p. 11. Mr. Bloch has received only a bachelor of arts degree from the College of Applied Arts. Exhibit 1, p. 30. He has not earned a master’s degree. Exhibit 1, p. 36. Mr. Bloch has never been a W-2 employee for any motor vehicle manufacturer. Exhibit 1, p. 41. He has also never been responsible for the design of any component of any mass-produced motor vehicle for any car manufacturer. Exhibit 1, p. 41, 42.

Nevertheless, he criticizes the cab structure of the subject 1993 Ford F-250 and in a vague and general manner opines that the vehicle, which was seventeen years old when it was involved in this high speed collision, should have been designed differently so that excessive crush would not have occurred. Byron Bloch, however, has not conducted any testing whatsoever to show that any

alternative design would have changed or altered the outcome as it pertains to Michael T. Rupert's injuries.

Instead, what Mr. Bloch does is reach bald, unsupported conclusions. When specifically questioned on the basis of these conclusions, it is readily apparent that his proposed testimony lacks sufficient reliability and is thus inadmissible pursuant to *Daubert* and its progeny.

At deposition, Mr. Bloch identifies six areas of the vehicle that he claims are defective and contributed to excessive crushing of the cab structure of the vehicle. He states that the subject 1993 Ford F-250 contained:

1. a rocker panel containing an open channel design rather than closed section design;
2. lack of inner-door structural beams promoting more crush in passenger compartment;
3. lack of reinforced windshield pillar and gusset allowing for more rearward crush in the driver's cab;
4. lack of catwalk forward of the cowl so that energy was prevented from being absorbed thereby causing more crush to the cab;
5. lack of safety-collapsible steering column causing rearward movement of the steering column and wheel; and,
6. open-section c-channel frame rails which were not curved causing more buckle and deformity of the cab.

See Appendix to Concise Statement of Material Facts, Exhibit 2, pp. 4-15; *see also* Exhibit 1, *supra*. Mr. Bloch identifies these six alleged defects, but fails to explain the testing and calculations necessary to arrive at his opinions. When deposed, he could not state any of the factors which are essential to formulating an opinion that a defect existed or that the accident would have yielded lesser injuries had alternative designs been used.

For example, he does not know basic variables related to the force of this accident that would be essential to his conclusions and computations: 1) he did not calculate the delta V of the vehicles involved in the accident; 2) he did not calculate the total amount of kinetic energy involved in this accident; and, 3) he did not compare whether there was more or less total kinetic energy

involved in this accident as compared to a frontal barrier test run under the circumstances of certain Federal Motor Vehicle Safety Standards. Exhibit 1, pp. 52, 94.

In addition, despite speculating that “[the rocker panel] was inherently so weak that it crushed,” he does not know what force - measured by any test, standard or specification – the rocker panel section should be able to withstand. Exhibit 1, p. 86. He is unable to state the amount of deformation that an alternative type rocker panel would have or should have sustained in this impact. Exhibit 1, pp. 85, 86. He also admits that the extent to which a rocker panel deforms in a frontal accident is influenced by a variety of factors, yet he did not even calculate the amount of kinetic energy the Rupert vehicle absorbed in this collision. Exhibit 1, pp. 92, 93.

Mr. Bloch is also unable to produce any photograph, drawing or article depicting any vintage full size pick-up truck made by some manufacturer other than Ford in the 1993 era showing how another manufacturer designed its rocker panels or beams or steering columns or any of the other allegedly defective components differently than Ford did in the subject vehicle. Exhibit 1, pp. 166-169.

Importantly, Mr. Bloch has not conducted any physical test of any kind in connection with his work in this case with regard to any of the six alleged defective designs as contained in his report. Exhibit 1, p. 176. Mr. Bloch has not done any physical test on any component from any comparable vintage pickup truck to show that a different design should have been used here. Exhibit 1, p. 176. Mr. Bloch did not conduct any surrogate studies. Exhibit 1, p. 122. And Mr. Bloch is unable to describe the results of any crash test where one vehicle was run into another vehicle at speeds comparable to the speeds involved in the subject accident. Exhibit 1, p. 176. He does not have any material comparing the performance of a 1993 Ford full-size pickup truck in a 40 mph offset frontal test against, with, for example, a 1993 GM full-size pickup truck. Exhibit 1, p.

178. And unbelievably, Mr. Bloch wrote his report and came to his conclusions without viewing or analyzing any Ford crash test. Exhibit 1, p. 180.

Mr. Bloch's conclusions deal with the crashworthiness of the vehicle and Mr. Bloch claims to be an expert in crashworthiness, yet he does not even consider whether this vehicle met the required crashworthiness standards as prescribed under the Federal Motor Vehicle Safety Standards ("FMVSS"). Exhibit 1, p. 57. He is aware that FMVSS 204, 207, 208, 210, 212, 216, 219 and 301 all deal with some aspect of the crashworthiness of motor vehicles. Exhibit 1, p. 73. He is even aware that certain standards, such as 216 and 301, deal with roof crush integrity and fuel system integrity, both of which have been made an issue in this case by Plaintiff. Exhibit 1, pp. 59, 61. Nevertheless, Mr. Bloch admits that he does not know whether the subject vehicle complied or did not comply with these various standards. Exhibit 1, pp. 73, 74.

In addition, Plaintiff's counsel provided Mr. Bloch with ten CDs from Ford containing "a lot of documentation, a lot of drawings... a lot of information," including but not limited to product specifications, design guidelines, and drawings. Exhibit 1, pp. 6, 81. Mr. Bloch, however, is unable to offer an opinion with regard to whether the Ford F-250 complied with any specific product acceptance specification or design guideline. Exhibit 1, p. 82.

In short, Mr. Bloch has not conducted any testing whatsoever to support his theories in this case, nor has he conducted any analysis to support these theories. Instead, he simply renders bald unsupported, speculative conclusions.

It is Mr. Bloch's opinion that had several aspects of the vehicle been designed differently, the crush would not have been as severe and Mr. Rupert would not have been entrapped in the burning vehicle. However, when specifically questioned regarding various facts which logically must be ascertained to establish his opinions, Mr. Bloch conceded that he had not performed the necessary computations. *See, e.g.*, Exhibit 1, p. 86.

Application of the factors set forth in *Daubert*, *Paoli*, *TMI*, and *Oddi* to the facts of the present case require that Mr. Bloch's testimony be excluded. The first factor is whether the theory has been tested or proven to be valid. According to Mr. Bloch's testimony, he has not tested his theory that a different design of the allegedly defective components would have yielded different results in this collision. Instead, he has no knowledge one way or the other whether his proposed design changes would have been capable of sustaining the impact at issue.

The next factor, whether the theory at issue has been subjected to peer review or publication, is not satisfied. Mr. Bloch could not provide any information whatsoever on how other manufacturers designed their full-size pickup trucks in 1993. Mr. Bloch himself has never been involved in the design of any of these components for any vehicle manufacturer, or published any articles regarding any issue in this case.

The next factor, the known potential rate of error and existence and maintenance of controlling standards, has not been satisfied. On this issue, the following testimony is relevant:

Q. Have you done any physical test involving the components that are the subject of your report? And by that I mean any one of the six components. Have you done a physical test of any kind in connection with your work done in this case, "yes" or "no"? I don't see one described in your report, or your resource book?

A. No.

Q. Just to be clear, you have no documents that you've brought with you today that describe the results of a crash test that you've done where you have run one vehicle into another vehicle, I don't care what the vehicles are, at speeds comparable to the speeds involved in this accident to evaluate the outcome, regardless of what vehicles are involved or anything else. You haven't done that, right?

A. No.

Q. So the reality is, with respect to all these materials you've brought here today, you don't have — you do not have any materials that you brought there today that compare the performance of a 1993 Ford pickup truck in a 40 miles per hour offset frontal test against a 1993 GM full-size pickup truck; is that right?

A. ...If you're asking only 1993, no, I'm not aware of such tests presently, having been done.

Exhibit 1, pp. 176-178. As in *Oddi*, Mr. Bloch conducted no tests and failed to attempt to calculate any of the forces on the Plaintiff or the truck, and used little, if any methodology beyond his own intuition. Thus, “[t]here is nothing here to submit to peer review, and it is impossible to ascertain any rate of error for [the expert’s] assumptions about the forces that caused [Plaintiff’s] horrific injuries.” *Oddi*, 234 F.3d at 158.

The next factor, widespread acceptance in the relevant field, is likewise not satisfied. In fact, Mr. Bloch did not even review one Ford crash test in concluding that the subject Ford vehicle was not crashworthy:

Q. Let's just be clear. You wrote your report and offered your opinions without seeing any Ford crash tests, correct?

A. Yes.

Exhibit 1, p. 180. Mr. Bloch's conclusions that the subject vehicle should have been able to withstand this severe collision are based on nothing more than speculation. However, this is precisely what the Supreme Court and Third Circuit Court of Appeals found to be insufficient. *In Re Paoli*, 35 F.3d at 742 (“the expert's opinion must be based on the ...methods and procedures of science” rather than on “subjective belief or unsupported speculation”); *see also Daubert*, 509 U.S. at 589-90. Mr. Bloch has not presented any testing or methodology such that his methods can be assessed or evaluated by others in the field of design engineering.

The next factor, the non-judicial uses to which the theory has been put, is also not fulfilled. Mr. Bloch has never placed the theories at issue to any use, aside from attempting to advance Plaintiff's theories in this case. Mr. Bloch has never even been an employee of any motor vehicle manufacturer nor dealt with designing the components of a vehicle similar to the subject truck.

The next factor, logical consistency, is similarly not satisfied by Mr. Bloch's conclusions. He cannot state, nor has he calculated, the kinetic force of this impact or the forces the various vehicle components were supposed to sustain, yet claims that various components were weak and should not have been as deformed after this violent collision. He does not support his conclusions, however, with any testing or data to substantiate that the vehicle design failed.

Further, and possibly where Mr. Bloch's theory is most deficient, is the precision factor. Mr. Bloch has described his proposed alternative designs in such broad, general and nonspecific terms that they are incapable of being logically and analytically addressed. When questioned regarding the particulars of his proposed alternative designs, he cannot state with any certainty that the proposed design changes were feasible at the time of manufacture of this 1993 vehicle or that they would have made a difference in this high speed frontal collision. Instead, Mr. Bloch has simply not done the testing that would be necessary in order to make such a link. Finally, with regard to the "fit" analysis required under *Daubert*, Mr. Bloch's testimony is inadmissible. "Fit" relates to the relevance of the proposed testimony with regard to the issues in the case. If the proposed testimony does not fit, it is not admissible. Because Mr. Bloch does not know whether his proposed alternative designs would have been capable of sustaining the impact which occurred in the subject accident, all of his testimony, opinions and theories that the vehicle structure was defective have no bearing or relevance and therefore do not "fit."

Based upon the foregoing, it is respectfully submitted that Plaintiff has not established by a preponderance of the evidence that Mr. Bloch's testimony satisfies the reliability and fit

requirements under *Daubert*. Therefore, such testimony should be excluded and the claims against Ford dismissed as a matter of law.

2. CAM COPE

Plaintiff attempts to introduce Cam Cope as her fire cause/origin expert. *See* Appendix to Concise Statement of Material Facts, Exhibit 3, p. 4. Cam Cope's opinions, however, are inadmissible in this case and should be excluded because his opinions do not rise to the requisite level of competence. Indeed, he attempts to support his theories through inductive reasoning and speculation. Further, Mr. Cope failed to conduct any testing whatsoever to support his theories and has failed to set forth any process by which he excluded other sources of the subject fire.

Mr. Cope's role is to opine as to the cause and origin of the subject fire. Exhibit 3, p. 4. Mr. Cope is not offering any opinions whatsoever on accident reconstruction, biomechanics, injury mechanism, alternative design, Ford's crash testing or any other crash testing, fuel system design or development or vehicle design. Exhibit 3, p. 4, 5. He has not published any papers through the society of Automotive Engineers. Exhibit 3, p. 154. His expert report has been disqualified in another case. Exhibit 3, p. 155.

Germane to Ford's position that Mr. Cope should be disqualified as an expert in this case is Mr. Cope's admission that he did not conduct any testing whatsoever for this case. Exhibit 3, p. 5. There are no Ford engineering drawings or Ford crash tests in his file. Exhibit 3, p. 9. He has no understanding of what the Delta V was in this accident, or of the closing speeds of the subject vehicles. Exhibit 3, p. 24. Mr. Cope acknowledges that FMVSS 301 is the fuel system integrity standard and that the purpose of 301 is to reduce deaths and injuries occurring from fires after crashes. Exhibit 3, p. 10. He further acknowledges that the subject vehicle complied with standard 301, and that in order to meet those requirements, Ford ran frontal and angular crash tests to certify

compliance with that standard. Exhibit 3, p. 11. Nevertheless, Mr. Cope did not consider this vehicle's compliance with 301 in forming his opinion. Exhibit 3, p. 11.

Importantly, Mr. Cope conceded that he did not consider all of the evidence available in rendering his opinions. Exhibit 3, p. 36. Instead, his opinions are based merely on what he saw while inspecting the vehicle. Exhibit 3, p. 36. He admits that he did not read all of the deposition transcripts from this case. Exhibit 3, pp. 29-32. In fact, he admits that he has not read approximately thirteen depositions and that he only skimmed over two others. Exhibit 3, p. 34. According to Mr. Cope, as the fire cause/origin expert, he is able to ignore certain depositions even though they may deal with whether that witness had any observations with respect to the fire. Exhibit 3, p. 34. He admittedly does not know if the burn patterns he believes existed are consistent with the witness's testimony that he did not review. Exhibit 3, p. 58.

Mr. Cope further admits that:

- 1) no vehicle is fire proof;
- 2) no vehicle is leak-proof under any circumstances;
- 3) vehicle fires can occur in vehicles manufactured by many other companies, including GM, Kia, Hyundai, Porsche, Volvo, Chrysler, Ferrari, Subaru, Audi, Volkswagen, Honda, Toyota, BMW and Mercedes;
- 4) no fuel tank location is impervious to compromise in a collision;
- 5) post collision fires can occur with tank locations forward of the axle, rear of the axle or in side saddle locations;
- 6) post collision fires can also occur with many different types of fuel tanks, including those made of plastic or steel; and,
- 7) there is no perfect fuel tank location in any vehicle.

Exhibit 3, pp. 6, 7.

It is Mr. Cope's conclusion that the midship tank in the subject vehicle contained the fuel that fed the subject fire. Exhibit 3, p. 47. Mr. Cope further concludes that the midship fuel tank located in this vehicle was manufactured by Ford, even though the fuel tank itself does not contain a Ford part number or a Ford emblem. Exhibit 3, p. 44. He admittedly knows of no document from Ford that states that the fuel tank on this vehicle would have been produced without a Ford part

number or Ford logo. Exhibit 3, p. 45. Mr. Cope did not even review any of the dealership records pertaining to this seventeen year old vehicle to consider whether the tank was aftermarket, as opposed to original equipment. Exhibit 3, p. 46.

This vehicle had a fuel inertia switch that would shut down the flow of gasoline upon impact in a collision with the forces involved in this collision. Exhibit 3, p. 63. Mr. Cope cannot state with a reasonable degree of fire science that the inertia switch did not trip in this case. Exhibit 3, p. 63. A large part of Mr. Cope's opinion is that there were three to four ounces of residual gasoline in the vehicle's fuel lines, so that even if an inertia switch was tripped upon impact so as to stop the flow of fuel, gasoline would have been released. Exhibit 3, p. 53. He bases his estimate of the existence of three to four ounces of fuel simply on "testing done over the years." Exhibit 3, p. 52. No testing whatsoever was done in this case to confirm the amount, if any, of fuel in the fuel lines at the time of impact. Exhibit 3, p. 54. Importantly, he admits that three to four ounces of gasoline would not sustain a gasoline fuel-fed fire like the one he opines occurred in this case. Exhibit 3, p. 107. He therefore claims – without basis – that somehow gas continued to flow. Exhibit 3, p. 107. He attempts to conclude that this additional gasoline may have flowed from the fuel rails, but then admits there would only have been about one or so ounces of gasoline in the fuel rail. Exhibit 3, p. 108. These conclusions simply do not bridge the analytical gap between his opinions and the facts upon which he relied.

Mr. Cope claims there were no anti-siphon valves in the fuel pump of this vehicle. Exhibit 3, p. 64. Again, however, he did not even do so much as to open up the fuel pump and look inside it upon inspection, and thus, does not actually know what is contained in the fuel pump. Exhibit 3, p. 64. He also has not looked at one engineering drawing or specification pertaining to the fuel pump of this vehicle. Exhibit 3, p. 65.

Mr. Cope opines that gasoline released from the fuel lines ignited due to some type of mechanical spark. Exhibit 3, p. 79. However, he also admits that in this crash, other fluids were released, such as brake fluid, power steering fluid, coolant, and perhaps transmission fluid. Exhibit 3, pp. 86-89. According to Mr. Cope, the manifold temperature of Mr. Rupert's vehicle at the time of impact would have exceeded 700 degrees, and the crossover pipe would have been between 700 and 750 degrees. Exhibit 3, pp. 89, 90. Mr. Cope states that transmission fluid ignites at about 626 to 716 degrees, and that if there was a release of transmission fluid that landed on the hot exhaust system components, it could have ignited. Exhibit 3, p. 91. Mr. Cope acknowledges that coolant or power steering fluid could also have ignited on the hot surface if released in this crash. Exhibit 3, pp. 90, 91.

Mr. Cope testified that brake fluid was not part of the initial fire (Exhibit 2, p. 93), yet at p. 22 of his official report, he states that "[t]he other possible source of ignition would be burning brake fluid which may have ignited on the hot surface of the manifold which is located below the brake fluid reservoir on the driver's side of the engine." *See* Appendix to Concise Statement of Material Facts, Exhibit 4, p. 33; *see also* Exhibit 3, p. 94. In doing so, he admits that "[t]he possible source of the fire is burning brake fluid because it is at the area of the back of the engine." Exhibit 3, p. 95. Despite making these statements, Mr. Cope testified at deposition that he would like to retract this statement from his report. Exhibit 3, p. 96. He claims it was merely a consideration, yet never states so in his report. Exhibit 3, p. 97.

Mr. Cope's own testimony also contradicts his conclusion that this was a gasoline-fed fire. He claims that gas fires have a tendency to burn faster and quicker than combustible fluid fires, yet opines that this was a slow burning fire. Exhibit 3, p. 104.

Mr. Cope opines ultimately that gasoline was released from the fuel crossover tube, which is a polymer/plastic component that connects the steel fuel rails at the rear of the engine. He concludes

that the fuel crossover tube was compromised because it was attached to the steel fuel rail without the use of clamps which should have been used to hold the hose on the steel rail. Exhibit 4, p. 23. Mr. Cope, however, admits that he has no idea what the differences in force would be to pull off the crossover hose from the steel fuel rail had it been attached with clamps, and that for all he knows, it could also have pulled off in an accident with this severity even had the hose been attached with clamps. Exhibit 3, pp. 77, 78. Mr. Cope also admits that he does not know if the crossover hose pulled off due to accident forces alone, or perhaps got caught up on some other component and snagged. Exhibit 3, p. 151. He has done no testing to show how or why the crossover hose allegedly pulled off of the steel fuel rail. Exhibit 3, p. 150.

Mr. Cope's opinions in this case are conclusory and subjective. His opinions are not based on sufficient physical evidence, but rather, on mere speculation. There is a lack of foundational information in his analysis to generate reliable conclusions. His opinions – because they are not based on scientific testing – would be more confusing than helpful to the jury in this case and should be excluded pursuant to *Daubert* and its progeny.

In this case, Mr. Cope opines that this 1993 Ford F-250's fuel crossover tube should have been attached to the fuel rail with clamps so that it would not have detached and so that gasoline would not have been released causing the fire. Yet, Mr. Cope admits that he has not conducted any testing to support his theory and admits that, if the system had been attached with "clamps," the tube still may have become detached in this collision and that the result would have been the same.

Mr. Cope's conclusion that gasoline was the igniting fuel in this fire is purely speculative. He admits that he did not even take into account witness deposition testimony that could have shed light on the burn patterns associated with this fire. He also admits to other possibilities of fire cause/origin, yet concludes without any testing whatsoever that the fire was fed by gasoline due to the crossover tube not being clamped to the fuel rail. He fails to analyze whether another system

could have provided a different outcome in this collision and has no opinion on the forces another system would have been able to withstand or whether any other design would have yielded different results. Mr. Cope fails to provide any reliable expertise or methodology to the jury in this case.

Based on the foregoing, it is respectfully submitted that Plaintiff has not established by a preponderance of the evidence that Mr. Cope's testimony satisfies the reliability and fit requirements under *Daubert*. Therefore, such testimony should be excluded and the claims against Ford dismissed as a matter of law.

B. PLAINTIFF CANNOT MEET HER BURDEN OF ESTABLISHING A PRODUCTS LIABILITY CRASHWORTHINESS CLAIM AGAINST FORD, AND THUS, FORD IS ENTITLED TO JUDGMENT AS A MATTER OF LAW

This is a crashworthiness case. "Crashworthiness" is a subset of products liability law that arises in the context of vehicular accidents. *Harsh v. Petroll*, 887 A.2d 209 (Pa. 2005). The doctrine imposes liability on the manufacturer not for causing the accident, but for failing to minimize the injuries brought about by a cause other than the alleged defect. *Habecker v. Clark Equip. Co.*, 36 F.3d 278 (3d Cir.1994). The doctrine permits a plaintiff to recover only for those injuries she can prove she would not have sustained had she been riding in a crashworthy vehicle. *Oddi v. Ford Motor Co.*, 234 F.3d 136, 142 (3d Cir.2000), (citation omitted). "If enhanced injuries cannot be shown, then no liability exists as to the manufacturer." *Id.*

A crashworthiness claim requires proof of three elements: 1) the plaintiff must prove that the design of the vehicle was defective and that at the time of design an alternative, safer, and practicable design existed that could have been incorporated instead; 2) the plaintiff must identify those injuries he or she would have received if the alternative design had instead been used; and 3) the plaintiff must demonstrate what injuries were attributable to the defective design. *Kupetz v. Deere & Co.*, 644 A.2d 1213, 1218 (Pa. Super. 1994).

Plaintiff cannot prove the existence of an alternative safer design without expert testimony. Indeed, under Pennsylvania law, expert testimony is required in order to show a defective design in a complex product such as an automobile. *See, e.g., Tennis v. Fedorwicz*, 592 A.2d 116, 117 (Pa. Commw. 1991) (“[E]xpert testimony is necessary whenever the subject matter of the inquiry involves special skills and training not common to the lay person.”); *Dion v. Graduate Hosp.*, 520 A.2d 876, 881 (Pa. Super. 1987) (“In a complex case, a jury, in order to reach an intelligent conclusion, is dependent on expert testimony.... Unless the jury is comprised of experts in the field, the verdict is based on mere conjecture. Such a verdict is worthless.”).

It is well established that any motorized vehicle carries certain substantial risks to the user and that such products are not unreasonably dangerous merely because they may be involved in accidents or because the operator may be injured during their use. *Id.* at 229; *see also Monahan v. Toro Co.*, 856 F.Supp. 955, 963 (E.D.Pa. 1994). In this regard, Pennsylvania law requires that a designer eliminate only unreasonable risk of foreseeable injury. A designer is merely required to take reasonable steps, within limitations of costs, technology and marketability, to design and produce a vehicle that will minimize unavoidable danger. *Craigie v. General Motors Corp.*, 740 F.Supp. 353, 358 (E.D.Pa. 1990). Thus, the manufacturer does not have to design an accident-proof or full-proof vehicle or one which will withstand bizarre accidents. *Id.* at 358. Plaintiff’s only experts are Byron Bloch (defective design) and Cam Cope (fire cause/origin). Plaintiff cannot establish any of the essential elements of a crashworthiness claim against Ford with either of these experts, and Plaintiff’s claims should therefore be dismissed.

The first element - that the design of the vehicle was defective and that, when the design was made, an alternative, safer, practical design existed - is not satisfied. Because Mr. Bloch cannot state that his proposed design changes were feasible at the time of manufacture of this 1993 vehicle and/or would have resulted in lesser injuries to Mr. Rupert, there can be no finding that any such

designs would have been safer than the ones which were used. Further, it is clear that Mr. Bloch cannot even state that, in 1993, other vehicle manufactures were designing full-size pickup trucks in a manner different than Ford, let alone in the manner he suggests.

Mr. Bloch conducted no testing whatsoever to show that his proposed design changes would have lessened the vehicle's deformity/crush in this accident. Instead, he simply concludes that due to the amount of crush damage in this violent collision involving a seventeen year old vehicle, Mr. Rupert was entrapped post accident.

His findings do not make sense. Mr. Bloch concedes that the vehicle's at-rest position was slanted so that the driver's side was angled 35% to 40% lower than the passenger side. He disingenuously opines, however, that the vehicle's positioning was not a factor in Mr. Rupert's ability or inability to exit the vehicle post-impact. Exhibit 1, p. 109. He also acknowledges that, according to the medical records, Mr. Rupert was unable to use either of his arms to assist himself in getting out of the vehicle due to injuries and that he did not sustain orthopedic injuries to his right or left lower extremity. Exhibit 1, p. 114. Nevertheless, Mr. Bloch believes that Mr. Rupert's inability to use his hands, or lack of lower extremity injuries, has no bearing on his conclusion that Mr. Rupert was entrapped in the vehicle due to crush. Exhibit 1, p. 121. Although Mr. Bloch claims that the vehicle's positioning and Mr. Rupert's injuries are insignificant in his analysis, he does not offer any sound rationale for his conclusion that the vehicle's design caused unnecessary entrapment. These conclusions are simply not supported by the evidence, nor are they rooted in sound testing or scientific methodology.

The evidence in this case fails to establish that the accident sequence would have unfolded any differently had Mr. Bloch's suggested proposed design changes been implemented. In the alternative, even if it is assumed only for purposes of this motion that an alternative design would have altered the accident sequence, Plaintiff offers no evidence that Mr. Rupert's injuries would

have been lessened, and to what extent, had any proposed design changes been implemented. Therefore, it has not been and cannot be established that Mr. Bloch's proposed designs would in fact have been any safer in this 1993 vehicle, than the design actually used. Likewise, Cam Cope, whose sole function is to testify regarding fire cause/origin alone, and not design defect, cannot and does not speak to the issue of alternative, safer design.

With regard to practicability and feasibility, Mr. Bloch candidly conceded that he had not analyzed specifically how his proposed designs could be implemented, the types of materials to be employed or the strength of those materials that would be necessary to create a different outcome. Further, he has not considered practical issues such as testing of a vehicle with the proposed designs in similar crash scenarios. In fact, he cannot point to one document or photograph showing that any other 1993 vehicle had the designs that he suggests or that some other vehicle with his suggested design changes would not have crushed the same way the Rupert vehicle did in this collision. Thus, there is insufficient evidence to establish that his proposed alternative designs are practicable or feasible.

The second element of a crashworthiness claim – what injuries, if any, the plaintiff would have received had the alternative safer design been used – has similarly not been satisfied. Mr. Bloch's concession that he does not even know what force a vehicle with his proposed alternative designs could have sustained is fatal because it establishes that a vehicle incorporating his proposed designs could have produced the same injuries to Mr. Rupert. Neither Mr. Bloch nor Mr. Cope offer any opinion whatsoever with regard to how Mr. Rupert's injuries would have been less severe had certain design changes been implemented. This is an essential burden in a crashworthiness case which has not even been touched upon by Plaintiff through her experts. Therefore, Plaintiff's crashworthiness claim necessarily fails.

With regard to the final element of a crashworthiness claim – what injuries were attributable to the defective design – the Plaintiff has similarly failed to present sufficient evidence. Because Plaintiff has not established what injuries would have been sustained by Michael Rupert with an alternative design, she cannot establish what injuries were attributable to the allegedly defective design. And again, Plaintiff has not even so much as mentioned this issue through her experts as neither Mr. Bloch nor Mr. Cope state any opinion whatsoever regarding the injuries of Michael Rupert that are attributable to any alleged defective design.

The Plaintiff lacks sufficient evidence to establish that there was an alternative safer design, what injuries Mr. Rupert would have sustained if the alternative design had been used and what injuries are attributable specifically to the allegedly defective cab structure and fuel line system. Thus, she has failed to establish a *prima facie* crashworthiness claim against Ford Motor Company and her claims should be dismissed at this time, as a matter of law.

C. IN THE ALTERNATIVE, FORD MOTOR COMPANY REQUESTS A DAUBERT HEARING

It is true that a *Daubert* hearing can be an efficient procedure for the court to carry out the gatekeeping function, especially when the record is not well developed. *Padillas v. Stork-Gamco*, 186 F.3d 412 (3d Cir. 1999). But where the record is well developed, where depositions have been taken and expert reports exchanged, the court may properly exercise its discretion to require nothing more. *Oddi*, 234 F.3d at 155 (party not entitled to in limine hearing before district court can reject an expert's testimony). Ford submits that in this case, the shortcomings of the “methodology” of both Mr. Bloch and Mr. Cope, based on their own testimony, establish a more than sufficient record for this Court to exclude their testimony outright and enter judgment in favor of Ford.

Mr. Bloch offers an entirely speculative defect opinion based on proposed alternative designs that he has not established would have prevented or mitigated the injuries in this case. The gaps in his chain of reasoning suggest that his opinion lacks the scientific rigor and objective

support required to distinguish admissible scientific opinion from inadmissible speculation. *Calhoun v. Yamaha Motor Corp., U.S.A.*, 350 F.3d 316, 322 (3d Cir. 2003) (“the expert’s opinion must be based on the ‘methods and procedures of science’ rather than on ‘subjective belief or unsupported speculation’; the expert must have ‘good grounds’ for his or her belief.”). He does not test his proposed designs to any extent, and thus, simply should not be allowed to tell the jury that his proposed designs should have been implemented into this vehicle.

Mr. Cope’s opinions are also speculative and entirely unsupported by any testing or methodology. He admits that he did not even consider all of the evidence, and failed to review or consider the testimony of thirteen witnesses, in rendering his opinions. His conclusions dangerously lack the required support, and should also not be heard by the jury in this case.

Accordingly, the opinions of Mr. Bloch and Mr. Cope are inadmissible under Rule 702, as construed by *Daubert* and *Kumho Tire*. Their opinions are also inadmissible under Rule 703 because they are not based on the type of things that other experts in the field rely on. Without their opinions, there is no evidence to support a finding that the 1993 Ford F-250 was not crashworthy, and thus, judgment is appropriate in Ford's favor as a matter of law. *See, e.g., Jones v. Toyota Motor Sales USA, Inc.*, 94 Fed. Appx. 879, 881 (3d Cir. 2004) (affirming summary judgment on crashworthiness claim and noting defendant presented evidence that plaintiff’s proposed design would not have improved product’s overall safety); *Childs v. General Motors Com.*, 1997 WL 611616, *5 (E.D.Pa. 1990) (summary judgment granted for defendant on alternative design where expert’s report failed to evidence that under alternative design, the setback would not collapse upon an impact of the type that occurred with plaintiff).

Based on the above, Ford respectfully requests that this Court grant the within Motion for Summary Judgment and enter judgment in Ford’s favor as a matter of law based on the existing record. In the alternative, although Ford does not believe the same is necessary in light of the

complete record in this case which includes depositions and reports of Plaintiff's experts, Ford respectfully requests that this Honorable Court hold a *Daubert* hearing with regard to the admissibility of both Byron Bloch and Cam Cope.

IV. CONCLUSION

For all the above-stated reasons, Ford respectfully requests this Court exclude the speculative opinions of Byron Bloch and Cam Cope and grant summary judgment in favor of Ford with prejudice. In the alternative, Ford respectfully requests that this Court hold a *Daubert* hearing to determine the admissibility of the testimony of Byron Bloch and Cam Cope at trial.

JURY TRIAL DEMANDED.

Respectfully submitted:

DICKIE, McCAMEY & CHILCOTE, P.C.

By: /s/ Annabelle L. Carone
Nancy R. Winschel, Esquire (PA ID No. 34617)
Annabelle L. Carone, Esquire (PA ID No. 83178)
Two PPG Place, Suite 400
Pittsburgh, PA 15222-5402
(412) 281-7272

DYKEMA GOSSETT, PLLC

By: /s/ Brittany M. Schultz
Brittany M. Schultz, Esquire
39577 Woodward Ave., Suite 300
Bloomfield Hills, MI 48304-2820
(248) 203-0802

Counsel for Defendant, Ford Motor Company

CERTIFICATE OF SERVICE

I hereby certify that on this 22nd day of August, 2014, a true and correct copy of the foregoing MEMORANDUM OF LAW IN SUPPORT OF DEFENDANT FORD MOTOR COMPANY'S MOTION TO EXCLUDE THE OPINIONS OF BYRON BLOCH AND CAM COPE, AND MOTION FOR SUMMARY JUDGMENT ON PLAINTIFF'S CRASHWORTHINESS CLAIMS OR, IN THE ALTERNATIVE, FOR A *DAUBERT* HEARING was served by electronic service through the U.S. District Court for the Western District of Pennsylvania ECF, as follows:

Victor H. Pribanic, Esquire
PRIBANIC & PRIBANIC, LLC - WHITE OAK, PA
1735 Lincoln Way
White Oak, PA 15131
(Counsel for Plaintiff, Michael T. Rupert)

Douglas G. Linn, II, Esquire
THE LINN LAW GROUP, LLC - CRANBERRY
20280 Route 19
Suite 6
Cranberry Township, PA 16060
(Counsel for Plaintiff Michael T. Rupert)

Thomas W. King, III, Esquire
DILLON MCCANDLESS KING COULTER & GRAHAM, LLP
128 West Cunningham Street
Butler, PA 16001
(Counsel for Plaintiff, Michael T. Rupert)

Heather L. Schmidt Bresnahan, Esquire
FISCUS & BALL, P.C.
310 Grant Street
3100 Grant Building
Pittsburgh, PA 15219
(Counsel for Plaintiff, Jacqueline C. Rupert)

Maurice A. Nernberg, Esquire
Joshua A. Lyons, Esquire
Gina M. DelRio Gazzo, Esquire

MAURICE A. NERNBERG & ASSOCIATES
301 Smithfield Street
Pittsburgh, PA 15222-2207
(Counsel for Plaintiff, Jacqueline C. Rupert)

Christopher J. McCabe, Esquire
PION, JOHNSTON, NERONE, GIRMAN, CLEMENTS & SMITH, P.C.
1500 One Gateway Center
Pittsburgh, PA 15222
(Counsel for Third Party Defendants, Stephen B. Macon
and Brayman Construction Corporation)

DICKIE, McCAMEY & CHILCOTE, P.C.

By: /s/ Annabelle L. Carone
Annabelle L. Carone, Esquire
Nancy R. Winschel, Esquire

*Counsel for Defendant,
Ford Motor Company*